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ABSTRACT

Language policy and planning has become a major concern of applied linguistics. Most language planning is institutional and not systemic, planning not the forms of the language but the relationship between the language and the individuals who use it. Institutional language planning, policy formation, provides the context for systemic language planning, whose objective is to expand language's potential for meaning. Language does not reflect reality, rather it actively creates reality. The role of grammar in this system is complex; it is the meaning-making potential of language. While any language can create new terms, its semantic base changes very slowly, resulting from material changes in the culture. Major upheavals in human history have been critical in semohistory. A significant component in these upheavals is a change in ways of meaning. Changing language can change the existing order. When planning language, applied linguists are not forging an ideologically neutral instrument for carrying out policy; they are creating an active force in shaping people's consciousness. A significant change in the human condition is the depletion of resources. Language planning can replace war discourse with peace discourse, the discourse of borrowing with that of saving, and the discourse of building with that of repair. (MSE)

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NEW WAYS OF MEANING: A CHALLENGE TO APPLIED LINGUISTICS

M.A.K. Halliday

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In 1984 in Brussels, Francisco Gomes de Matos opened the Sixth World Congress by reviewing the history of previous congresses and assessing how far in those twenty years applied linguistics could be said to have progressed towards maturity. He referred to the first one in the series, the Premier Colloque International de Linguistique Appliquée held at Nancy in 1964; and noted the doubts then expressed by the organizers about holding a colloquium devoted to applied linguistics.¹ Rereading the preface to that Nancy volume, by Bernard Pottier and Guy Bourquin, I was struck by what they had selected as the initial theme, that of 'semantic information':

l'information sémantique en linguistique et en traduction
mécanique

-- to which, with some hesitation, they had added another, that of foreign language teaching:

nous avons ... risqué l'entreprise, en adjoignant au thème
initial celui de la pédagogie des langues vivantes: ...

This, they explained, was why the book seemed to lack unity:

d'où l'incohérence apparente du contenu de ce volume.²

Those times have changed. In Sydney, at the Eighth World Congress in 1987, out of 548 papers submitted for consideration about one half were on some aspect of second language teaching and learning; while the 'initial theme' from the Nancy colloquium was hardly represented at all. Very soon after Nancy, machine translation largely disappeared from the academic scene in western Europe and North America; meanwhile 'semantic information' was shifted to the domains of computational linguistics and artificial intelligence, and these had their own international forums and events. It is quite natural that our efforts should constantly be regrouped into new and different formations. We have already seen the generalized concept of educational linguistics emerging during this time. We have not yet reached a comparable stage with clinical linguistics; this has still not become a unified concept, although there are major achievements in particular areas, and the theoretical base in neurolinguistics is certainly gaining strength.³ And the other major area that has developed during this period is that of language policy and planning. At the same time, however, it is noticeable

that with all the varied activities that go on under the name of applied linguistics we have still not really achieved a transdisciplinary perspective. I say 'transdisciplinary' rather than 'inter-' or 'multi-disciplinary' because the latter terms seem to me to imply that one still retains the disciplines as the locus of intellectual activity, while building bridges between them, or assembling them into a collection; whereas the real alternative is to supersede them, creating new forms of activity which are thematic rather than disciplinary in their orientation.

A discipline is defined according to its content: what it is that is under investigation. The study of life forms, for example, constitutes the discipline of biology; and such disciplines split up into taxonomies as their domains become more and more subdivided: first biology, then zoology, then vertebrate zoology, entomology and so on. A theme, on the other hand, is defined not by content but by aspect, perspective or point of view. Perhaps the earliest theme to emerge in European scholarship was mathematics. If I measure anything systematically I am doing mathematics; it does not matter what it is that I am measuring. The 'content' of mathematics does not exist in the material world; it is created by the activity of mathematics itself and consists of ideal objects like numbers, square roots and triangles. In the nineteenth century, history became transformed into a theme, in the form of evolution: any phenomenon could be studied from the standpoint of how it evolved. The twentieth century^{then} countered this with the theme of structuralism: any phenomenon studied from the complementary standpoint of how it is organized and held together. This gave us our sense of language as 'un système où tout se tient',⁴ to use Meillet's famous phrase that Firth so vigorously objected to. Sometimes the theme may appear without its name being taken up, like cybernetics for phenomena considered as circular, self-regulating systems; or more recently cladistics, for phenomena studied from the standpoint of how they change, whether by evolution, by growth or by individuation. (Perhaps the names did not stick because their Greek origins were not widely recognized? -- I had to look up κλάδος myself to find that it meant 'a young slip or shoot broken off', especially a small branch of an olive tree.) For students of language it seems to me that the most important theme to emerge in this half century has been semiotics: any phenomenon investigated from the standpoint of what it means -- anything considered as information, if you prefer. Not everyone likes the associations of this term -- I myself do not accept the implication that ^{the study of meaning} must be grounded in some theory of the sign. But it serves to make explicit the perspective that some of us try to adopt, not only towards language but towards many other human activities as well.

We have recognized for a long time that activities such as teaching a foreign language ~~on language planning of any kind~~ involve more than the content of any one discipline: at the very least, they involve psychology and sociology as well as linguistics. Our academic courses -- M.A. in Applied Linguistics, and its equivalents in other educational systems -- have always been interdisciplinary in this sense. Now I am not suggesting that such programmes can be underwritten by a single theme, any more than they can be by a single discipline; they are much too complex and many-sided to be looked at from any one perspective alone. But I think in the future such activities will benefit as much from the complementarity of different themes as from the summation of different disciplines. ~~To give an example~~ Our practice as language teachers depends more on our being able to adopt the complementary perspectives of two conflicting themes, that of 'learning' and that of 'meaning', than on putting together pieces from linguistics with pieces from psychology and sociology. The reason learning a foreign language can be so extraordinarily difficult for an adolescent or adult who has not grown up ~~multilingual~~ multilingual is that there is a real-life contradiction between these two modes of processing language: that of learning it for future use, and that of using it. They can no longer both learn language and 'mean it' at the same time. The teacher cannot resolve this contradiction, but has somehow to transform it from a constraint into a condition which enables, and even enforces, the learning process.

Another activity that has become a major concern of applied linguistics -- which is and no less complex, as regards the themes that are involved, than language teaching -- is that of language policy and planning. I do not know at which of our congresses this first emerged as a separate section; there were 31 papers in the proceedings of this section at Brussels, as well as references to language planning in papers of many other sections, and we have had a Scientific Commission in this field from the start. Language planning is a highly complex set of activities involving the intersection of two very different and potentially conflicting themes: ^{one} that of 'meaning', common to all our activities with language, and other semiotics as well; the other theme, that of 'design'. If we start from the broad distinction between designed systems and evolved systems, then language planning means introducing design processes and design features into a system (namely language) which is naturally evolving. This is bound to be a highly complex and sensitive task.

The greater part of language planning activity is institutional rather than systemic. That is to say, it has to do with planning not the forms of a language but the relationship between a language and those who use it.⁵ The main issues are what languages to use for what purposes in the community and how to ensure that people in the community have access to the languages they

want. This aspect of language planning involves formulating policies, getting them adopted, and making provision -- primarily educational provision -- for ensuring that they are carried out. These measures provide, in their turn, the institutional context for work in second language teaching; and also for work in mother tongue teaching for purposes of language maintenance and vernacular literacy.

They also provide the context for language planning of the systemic kind; in which the aim is to design the language itself, so as to expand its potential for meaning. Typically this kind of planning is undertaken when a language is being developed for use in new registers--new functional contexts in which it has not previously served. Almost always the main effort is directed towards expanding the lexical resources: planning consists in establishing principles for the creation of new terms, and applying these principles so as to develop systematic technical taxonomies in specific registers defined by field, or discipline. An example of this is the development programme for Swahili, as reported by S.J. Maina of the Kiswahili Council of Tanzania.⁶ Discussing the enrichment of Kiswahili, Maina notes that 'much of the effort is being specifically directed towards enrichment of Kiswahili terminology'. He refers to the 'three main processes [generally] used for the enrichment of terminology in a language', namely compounding, derivation and borrowing; and gives examples from Swahili of all three, specifying the types of compounding and derivation that are used and the sources of borrowed words. The policy context for this work is Kiswahili as a medium of instruction: Maina notes that 'there is a definite move towards the adoption of Kiswahili as a language of instruction in Secondary Schools'.

Maina also notes some of the objections that have been raised, mainly to new terms whose taxonomic relationship is obscure (e.g. the words suggested for hydrophily, hydrophyte and hydrotropism have no common element corresponding to the hydro-); and ^{some of} the difficulties that arise with compounds that 'carry a heavy semantic load' but which are not yet felt as single words. 'A high frequency of usage will hopefully make users forget looking at the components of the words and accept the single lexical unit.'

If we now turn to the grammar, then

apart from the grammatical processes involved in the formation of new words, which may need minor adjustment, very little attention in language planning is devoted to developing the grammar of the language. Not that the planning agencies neglect grammar; but the effort here is directed towards standardization and the correction of errors, not to the development of new grammatical patterns. This naturally raises the question: why? -- or rather, why not? Why does enriching the language not connote also the enrichment of

the grammar? The answer, presumably, would be either that it is not necessary or that it is not possible; or perhaps some combination of the two, such as that it would be desirable but is too difficult.

To say that the grammar is not planned means that no-one intervenes in its evolution by design. It does not imply that no grammatical changes take place; they clearly do. Newspapers in countries with rapidly developing languages frequently carry complaints that the language does not read like itself any more; it reads like English, or whatever is the predominant external source. Typical examples^{given} are various kinds of 'voice' pattern: that is, clause types analogous to passives, derived equatives (clefts and pseudo-clefts) and so on, which function to distribute the balance of information in the clause^{along lines}, comparable to Theme + Rheme and Given + New in English. It is hard to say whether the patterns that seem alien to the speakers of the language have been 'borrowed', by loan translation, or have been 'coined' in the language itself; that line is virtually impossible to draw. Since the contexts in which they are used are contexts that are already associated with English (science and technology, bureaucracy and administration), and since their discourse functions are already defined in English discourse, such patterns will tend to seem English (that is, foreign) anyway, whether or not the forms themselves bear any great resemblance to English syntax. It is the overall semantic style that seems imported.

But whether or not it is possible to trace the source of particular changes, there may be significantly different views on what underlying^{general} processes are taking place. Let me try and summarize these views in their canonical forms, recognizing that those who incline towards one view or another would often hold some modified version of it. One view would be that all languages are the unchanged products -- unchanged, that is, except on the surface -- of a semantic development that took place early on in human history, determining the overall structure and content of the semantic system, which is therefore universal to all humankind. The grammar is the arbitrary, or conventional, representation of a pre-existing reality, or a pre-existing cognitive model of such reality. Of course, new things are^{constantly being} created, new objects, institutions and abstractions, and these get names; but naming new things (in this view^{by itself} does not^{by itself} perturb the semantic environment -- hence if new grammatical forms arise in the course of technical development, they have been borrowed. In this view the lexicon is kept clearly distinct from the grammar, and the grammar is concerned^{only} with ideational meaning, interpersonal functions being excluded. Enriching a language, in this view, means creating new terms which operate, or could operate, within existing contexts of use. I think Labov's

perspective would be fairly close to this one.

A second view would be that language is continually evolving, and that this includes the semantic system, which is not constant for all times and places but differs from one time and one place to another. The material and non-material conditions of a culture are reflected in the grammar of its language, which is not arbitrary; when these change the language changes in response. The language thus optimizes itself in relation to its environment; new forms will arise when called for -- they do not need to be ^{explicit version of} borrowed. An ^{explicit version of} this view was articulated by N.Ya. Marr and his associates in the Soviet Union in the 1930s and 1940s, based on a simplified marxist interpretation of history, with language as part of the superstructure erected on the economic base; language changed through stages, or 'stades', corresponding to primitive communist, slave, feudal and capitalist modes of production. As an example Marr cited the ergative structure in transitivity, which he thought reflected a way of explaining phenomena arrived at before an understanding of causality had been reached.⁷ Put in more general terms, this view would hold that language reflects reality through the intermediary of human cultures; hence in the long run the grammar changes in response to the patterns of cultural change, even if the process is a very gradual and indirect one.

There is obviously much room for intermediate positions between these two extremes. But there is also a third view which is different from either of them: the view formulated by Whorf, following on from Sapir, and also, against rather different intellectual backgrounds, by Hjelmslev and by Firth. In this view language does not passively reflect reality; language actively creates reality. It is the grammar -- but now in the sense of lexicogrammar, the grammar plus the vocabulary, with no real distinction between the two--- that shapes experience and transforms our perceptions into meanings. The categories and concepts of our material existence are not 'given' to us prior to their expression in language. Rather, they are construed by language, at the intersection of the material with the symbolic. Grammar, in the sense of the syntax and vocabulary⁸ of a natural language, is thus a theory of human experience. It is also ~~through its metafunctional operation~~ a principle of social action. In both these functions, or metafunctions, grammar creates the potential within which we act and enact our cultural being.⁹ This potential is at once both enabling and constraining: that is, grammar makes meaning possible and also sets limits on what can be meant.

I shall adopt this third view: that our 'reality' is not something readymade and waiting to be meant -- it has to be actively construed; and that language evolved in the process of, and as the agency of, its construal.

Language is not a superstructure on a base; it is a product of the conscious and the material impacting each on the other -- of the contradiction between our material being and our conscious being, as antithetic realms of experience. Hence ^{language} ~~we~~ has the power to shape our consciousness; and it does so for each human child, by providing the theory that he or she uses to interpret and to manipulate their environment.¹⁰

But, by the same token, since language evolves out of the impact between the material and the conscious modes of being, it follows that as material conditions change the forms given by language to consciousness also change. Grammar construes reality according to the prevailing means and relations of production -- or what we ^{wrongly} call 'production' (I shall return to this at the end). But these are not constant; they have evolved through different forms at different times and places. The meaning-making potential of language -- the grammar, in our current sense of the term -- has evolved along with them. It is also not the same throughout the courses of human history.

But the relationship of the grammar to these changing material conditions is an extremely complex one. Semogenic processes -- processes of constructing meaning -- cannot be understood outside of their historical contexts; but neither can they be derived from these contexts by any simple relation. Let us put it this way: language is at the same time a part of reality, a shaper of reality, and a metaphor for reality. Once any form of language -- any grammar -- has come into being, it participates itself in the shaping of historical processes, including those which constitute the means and relations of production. First, as a part of reality it makes it possible for people to coordinate material practices and it constructs the social relationships that go with them. Secondly, in enabling these forms to evolve it also, as the 'construer' of reality, both ensures and at the same time constrains their evolution into something else. Language constrains their evolution because the reality that the grammar enacts is that of the prevailing socioeconomic order; ~~shall consider in a moment to what extent that implies the socioeconomic order from the standpoint of those who established it and maintain it -- also a very complex issue~~ hence language will tend to be conservative -- the way things 'are' is the way they are. But it ensures that the forms will evolve, because the grammar can never be either fixed or monolithic; it also contains all the prevailing contradictions and complementarities, both those that exist within the material, socioeconomic domain, ~~considered in and of itself~~, and those that inhere in the impact that engendered language in the first place, that between the material domain and the conscious one. And so, thirdly, as a

metaphor for reality language re-enacts, simultaneously, in its own internal system-&-process, through multiple fractal formations, the various contradictions and complementarities that it imposes on the reality that it is construing.

So while any language can create new names overnight, its semantic base -- what Stalin, in demolishing Marr, called its grammatical system and basic lexical stock -- under typical conditions¹¹ change only very slowly. The mechanism of such change has to be sought in the dialectic between the system and the instance.¹² ~~in what I can hope to talk about today~~
~~although it is not a crisis~~ But such change is not random (here Marr was right): it is a function of changes in the material conditions of the culture. The history of language is part of human history; it is not some mysterious surrogate process that goes bubbling along on its own. Thus major upheavals in human history are also linguistic upheavals. Grammar, since it is internal to language (not located at either material interface), can to a certain extent 'take off' on its own; but since it is the powerhouse for construing experience there can never be a total disjunction between the symbolic forms and the material conditions of their environment.

What are the major upheavals in human history that seem to have also been critical in what we might call semohistory? One is, almost certainly, settlement: the gradual transition from moving around after food to staying in one place and raising it. A second is probably the 'iron age' -- although these two could be seen as the initiating aspect and the culminating aspect of a single complex transition. A third would be the so-called 'renaissance' in Europe, culminating in the industrial revolution. And we should now add a fourth, namely the present: the ^{move into an} age of information, if you like, although we may need to think of it in rather different terms. Let me try to focus on these as changes in the semiotic construction of reality: not seeing them in terms of any of our western ideological constructs -- neither with eighteenth century 'fall from grace' romanticism, nor with nineteenth century 'all for the better' progressivism, nor with twentieth century 'nothing ever changes' ostrichism; but recognizing that they were transformations in the human condition which took place in some places and not others, among some peoples and not others, for a variety of complex historical and geographical reasons. There was nothing inevitable about them; rather, they arose as a potential which on some occasions was taken up.¹³

A significant component in these ^{historical} upheavals, I am suggesting, is a change in ways of meaning. (1) With settlement, there developed a new semiotic mode, namely writing; but the importance of writing lies in the grammar that

the shift from hunting and gathering to pastoral and agricultural practices

develops along with it. This is a grammar in which things are construed as commodities; they take on value, and can be itemized and drawn up in lists. This work is done by the nominal group: nouns are measured into quantities, they are assigned qualities along various scales, and organized into taxonomies of classes and sub-classes. It is also a grammar in which social relations are transformed ^{into} institutions. But the main source of abstract meaning seems to shift from the interpersonal towards the ideational -- from, for example, the rights and duties of kinship to generalizations about the phenomena of experience;¹⁴ and within the ideational, from processes towards things. This shift into 'settlement' semantics is of course masterminded by the grammar; but it is also constituted iconically by the shift into the written medium, whereby discourse itself becomes a thing and the abstractions -- the written symbols and their arrangements -- are transformations of processes into things. It is important to stress, however, that writing is not a cause; we are not talking about causal relationships but ^{about} realizational ones, whereby in the impacting between the material processes and the processes of human consciousness the grammar construes the reality of a settled agricultural existence, in which activities lead to products, and the space-time flux of experience is overlaid by constructions of objects having fixed location in space. Overlaid, but not obliterated: the pre-settlement grammar is still ^{there in} the language -- but it is no longer the predominant mode of meaning. We could perhaps give an analogy with the history of a late twentieth century individual: in the course of learning to read and write, the child takes on the grammar of the primary school, with its different construction of meanings -- but the grammar of home and neighbourhood is still there underneath it.

(2) In the classical, iron age culture of the Eurasian continent, the grammar became further transformed, taking up and expanding those options by which phenomena became 'objectified', so that other domains of experience, hitherto construed as process-like, could be modelled in terms of things. As techniques evolved into technologies, discourse too became technical: the grammars of ^{ancient} Greek, Chinese and Sanskrit construed processes and properties as nouns, like 'movement', 'force', 'change', 'volume', 'line'; and created long mathematical nominal groups, like this one from Aristarchus of Samos:

The straight line subtending the portion intercepted within the earth's shadow of the circumference of the circle in which the extremities of the diameter dividing the dark and the light portions of the moon move ...

-- all of which is merely the Subject of the clause.¹⁵ If we continue the educational analogy, these are the ways of meaning the student will meet in the middle school, where educational knowledge becomes technical and the disciplines begin to emerge. (3) Then, with the 'advancement of learning' that

led to what we, in the west, were brought up to think of as the 'modern' age, the grammar was restructured once again, ^{this time} through a metaphorical upheaval which resulted in the kind of language ^{now} used at congresses of applied linguistics, or indeed at congresses of all kinds and in many other contexts as well. Reality has been reconstrued in the learned, bureaucratic and technocratic mode that we are all so familiar with today; for example,

What we seek is a capability for early initiative of offensive action by air and land forces to bring about the conclusion of battle on our terms.

-- naively, we want to be able to attack first to make sure we can win.

It would be a gross oversimplification to present all our semohistory as a relentless march towards what one might call 'thinginess'. The semiotic processes involved are highly complex, and they lead to syndromes of all kinds of features which coexist in coteries, complementarities and contradictions. Moreover the grammar of every language is a mix of semiotic modes, whether or not it has been through these various upheavals. But the particular mix that characterizes the elaborated tertiary styles of the Eurasian world languages, from Japanese and Chinese at one end of the continent to English, French and Spanish at the other, is the result of the layering, one on top of another, of all these various 'moments' in their history through which experience has been ongoingly reconstrued in successively more abstract and objectified terms.

I hope by now we are beyond the point where we have to pretend that everybody's world view is alike, just in order to protect ourselves from a foolish accusation of prejudice by those who cannot distinguish between 'different from' and 'better (or worse) than'. The task for applied linguistics here is to interpret the grammatical construction of reality: to use our theory of grammar -- let us call it our 'grammatics' -- as a metatheory for understanding how grammar functions as a theory of experience. This means taking account both of those features that are apparently found in all languages, and so constitute the construction of the essential human experience, and those that are specific to particular forms and phases of the human condition.

It is a difficult task, which tends to get pushed off the agenda because it is so hard to do and so easy to decry. Let us try and locate ourselves somewhere in between two extreme opposing points of view. One extreme would be: all grammatical patterning, whether invariant or varying between languages or within one language, is random and arbitrary, and has no bearing whatever on how people interpret experience. At the other extreme would be the view that all grammatical patterning, invariant or varying, contributes directly to the construction of reality. Now, ^{everything} we know about language,

and also about other human systems, suggests that neither extreme is likely to be valid: we should expect that some kinds of patterning will be relevant and some kinds more relevant than others. but not all, ^{Two} criteria suggest themselves. One is that such significant semantic effects will be achieved not by any single grammatical features, but only by syndromes, assemblies of features from different parts of the grammar which typically co-occur, in part reinforcing each other and in part contradicting each other, but constituting as a whole a distinctive meaning style. The other ^{criterion} is that such features are likely to be covert rather than overt; they will be found among the cryptotypic patterns of the grammar which typically remain beyond the limits of our conscious attention. Only the interplay of diverse semantic forces, largely hidden from view, would be powerful enough to slant us towards one rather than another among the 'possible worlds' into which our experience could be construed.

If we look at the world as a whole it is clear that different reality constructions can and do coexist. There are a few communities, now highly at risk, whose meaning styles are those of a hunting-gathering, non-settlement culture; there are large areas of peoples who mean in a settled but non-urbanized, agricultural mode; and a fairly massive ^{of the globe} portion, ^{groups} dominated by industrialized, urban semantic patterns. These ^{are} not insulated from one another; there is constant mixing and interpenetration of the different modes. We cannot work with the traditional disjunction between sociology and anthropology, or its counterpart in literacy theory, according to which there are two human populations, the writers and the non-writers, with a clear dichotomy between them. Rather we should envisage a multidimensional space within which human beings construe experience, with certain regions within that space being taken up preferentially by different groups to resonate with the different conditions of their material existence.

But since these conditions were in fact ordered in time -- thus the industrial age followed the agricultural age and not the other way round -- there is an implicational scaling here: a settlement grammar has evolved through a non-settlement grammar, but not vice versa. Hence the layering of meaning styles referred to earlier: the different models of reality coexist within one language, features of the earlier phase persisting in very much the same way that features of the earlier material conditions continue to be part of the total experience. (A word of caution here. It is important not to be seduced by the analogy of the individual mentioned earlier. The individual child may, up to a certain point, recapitulate the history of the semantic system as he moves through primary, middle and tertiary education. But this pattern of change is one of growth, not one of evolution; if we say the earlier phases 'persist' this is in a very different metaphorical sense.)

But if different models of reality coexist within one language, what is to ensure that every group takes up the same set of options, construing their experience according to the same semantic priorities? The person who put this question on the agenda was Basil Bernstein, who showed that within our western societies there were in fact distinct modes of meaning by which the two major social classes construed reality.-- and that while the members of the working class typically selected for one mode, those in the middle class did not just select for the other but ranged over both. This is just the pattern that we should expect if the two modes derive from different phases in the evolution of the system. This is not to suggest that Bernstein's 'restricted code' is the language of pre-industrial societies; that would be absurd -- and in any case impossible, given the nature of evolutionary change. What it is saying is that the forms of discourse that Bernstein identified ^{under the heading of} / restricted code (notably the orientation towards the particular in ideational meanings and towards the implicit in interpersonal meanings) constitute semantic styles which, while continuing to evolve, have not taken up the specific options that construe experience according to the changed conditions of late capitalist society -- as it is construed, that is, by those who orchestrate the changes.

Bernstein ran head-on into the greatest disjunction of all: that a class-supported culture cannot admit the reality of social class. He was vilified from all sides, his professional standing arraigned; even today he is being labelled 'class chauvinist', by people who have never read what he wrote and, to their shame and disgrace, will casually (that is, in a 'to be taken for granted' manner) guillotine a scholar who dares to break their sacred taboos. What Bernstein understood was that, given a single grammar, the potential of that grammar can be taken up in consistently different ways by different groups of people, selecting with different probabilities in the same system and so in effect construing different forms of social relationships and different models of experience. Bernstein's original and very practical concern was to show how one of the two groups was consistently disfavoured by this process -- a semiotic process which turns out to be the fundamental mechanism by which oppressed groups in society contribute to the status quo of their own oppression.

Since we cannot quantify 'same or different', it is largely a matter of our own angle of approach whether we say that restricted and elaborated codes, or coding orientations, construe different realities, or the same reality seen from different ends. What we need to recognize is that, while the system of the language construes the ideology of society as a whole, the

deployment of resources within the system differentiates among different groups within a society. ~~What I want to come back to this point below.~~ There is nominalization in both codes; but that in the elaborated code is both more abstract and more general, and abstraction times generalization equals power. There is grammatical metaphor in both; but that in the elaborated code tends to be ideational, that in the restricted code interpersonal -- and ideational metaphor equals power. The elaborated code is not merely the code in which the genres of power are written; it is the code in which material and social reality are construed from the standpoint of those who dispose of it.

One of the few of Bernstein's contemporaries who understood what he was saying was Mary Douglas, who saw that he was (as she put it) 'cutting the middle classes down to size'. But Bernstein's ^{linguistic} data base was limited, and it is only now that we have a large-scale study where it is shown by systematic linguistic analysis, clause by clause, of over 20,000 clauses (the full sample is three times as large) that he was right. Ruqaiya Hasan, in her study of the natural conversations that take place between mothers and their three-year-old children, ^{in an Australian urban society} has demonstrated that ~~there are systematic and regular semantic differences in the way mothers talk to children,~~ ~~Australian urban society,~~ according to two social factors: one, the sex of the child, and two, the class of the family.¹⁶

Now everyone recognizes -- well, perhaps not yet everyone; but very many people recognize -- that the resources of the grammar as they are typically in the discourse of settlement languages deployed, ^{construe} the world from the angle of the male, whether in encoding social norms, in naming and addressing, in assigning transitivity roles or a variety of other such enactments.¹⁷ We have a Scientific Commission on Language and Sex to deal with the situation (and note in this connection that it is assumed that by working on the language you can change social reality, which makes sense only if you accept that reality is construed in language). But why have we no Scientific Commission on Language and Class? When Hasan shows that mothers of boys use a different code from mothers of girls, she is praised for having added a new dimension to our understanding of language and sex. ^{by the same linguistic techniques} When she shows that working class mothers use a different code from middle class mothers, she is criticized on the grounds that there are no such things as social classes, and (somewhat self-contradictorily) that anyway mothers' and children do not belong to them. It is not difficult to see why, although the explanation may sound very obvious. ~~and in fact it is not~~ It is acceptable to show up sexism -- as it is to show up racism -- because to eliminate sexual and racial bias would pose no threat to the existing social order: capitalist society could thrive perfectly well without sex discrimination and without race discrimination. But it is not acceptable to

show up classism, especially by objective linguistic analysis as Hasan has done; because capitalist society could not exist without discrimination between classes. Such work could, ultimately, threaten the existing order of society.

If language merely 'reflects' our experience of what is out there, by correspondence with the categories of the material world, it is hard to see how we could threaten or subvert the existing order by means of working on language. But this is what we are doing when we plan the grammar in order to combat sexism. That this makes sense is because language does not correspond; it construes. We are not easily aware of these effects because they are quantitative and gradual; and, as Paul Ehrlich has pointed out, as a species we are not biologically predisposed to recognize and respond to gradual effects, the 'innumerable small momenta' so aptly labelled by Whorf. We recognize and respond to catastrophes; but the evolution of meaning is not usually catastrophic (except when a Shakespeare or a Newton comes along), and we do not naturally attend to the steady, infiltrating ^{linguistic} processes by which our ideological constructions are put in place.

For the same reasons, it is hard to illustrate these effects from text examples; if we represent them instantially, we need very large samples of discourse to bring them out. By the same token, however, we can represent them systemically -- as features of the system rather than of the instance. (That is, as langue rather than as parole -- except that we have first to deconstruct that dichotomy, in order to show that they are not distinct phenomena, but complementary aspects of the same phenomenon.) Let me cite two examples of meaning construction from languages in the Eurasian culture band which did not participate in the original western shift to capitalism and industrial technology: Urdu, and Tagalog. Hasan has shown that Urdu has very many 'implicit devices': that is, grammatical contexts in which no reference is made to the entity (person or thing) that is involved in a particular process because the context of situation makes it clear.¹⁸ Taken by itself, this could be an arbitrary fact of the grammar; the significant point is, however, that Urdu speakers positively favour the 'implicit' option wherever it is available. To be an Urdu speaker 'is to believe that your addressee knows what you are on about; it is to assume that the chances of ambiguity are so low as to be almost negligible'. The listener can construe the text because of participating in the same culture, in which so much is taken for granted about social relationships and about possible roles. And this brings out the dialectic between the system and the instance: the grammar provides the potential, the systemic options, for implicit reference; these options resonate with the ^{prevailing patterns} of the culture; they are taken up as the most

frequent options in everyday discourse; this feature is thus reinforced as part of the grammatical system. Thus the instances constitute the system, and the system defines the potential for each instance.

In the grammar of Tagalog, Martin identifies three key motifs that are critical for the cultural construction of reality -- he refers to them as 'grammatical conspiracies'; these are the motifs of face, family and fate. For each of these Martin presents syndromes of features that 'conspire' to construe experience and enact social relationships in certain ways which he then contrasts with comparable features in English. Thus in the family motif, 'the basic theme ... is that of "togetherness": doing things together or having things in common'. Martin relates this to Hasan's 'taking things for granted' in Urdu, identifying ten features in the grammar which collectively construct togetherness; and contrasts it with English grammar's construction of individuality. Face 'has to do with appearances: respecting other persons' positions, possibly at one's own expense'; this 'appearance' is contrasted with the English orientation to 'reality', and is construed by a further ten grammatical features. The 'basic theme of the fate conspiracy is that of events taking place outside of an individual's control -- things simply happen; one cannot really determine one's fate'. Martin finds nine features sustaining this 'fatalistic' construction, and this he contrasts with the 'deterministic' construction of English.¹⁹

The kinds of meaning style described by Hasan and by Martin tend to be characteristic of cultures where the members are closeknit and homogeneous, and share many of the same assumptions and values. It is an extension of family language, a semantics for contexts where only a small proportion of one's total discourse would involve interacting with strangers. Of course this kind of discourse occurs among speakers of English too; and presumably in every language in the appropriate interpersonal contexts. But what Hasan and Martin are saying is that this cultural reality is actively constructed by regular and systematic features of the grammar of the languages concerned. And here we find a significant contrast with English. Mathesius had already drawn attention over fifty years ago to certain changes that took place in Late Middle / Early Modern English, coinciding with the spread of printing and hence with the cultural upheaval of the renaissance. These seem to make up a syndrome which, interpreted in systemic terms, realigned the metafunctional priorities as between the textual and the ideational elements in the structure of every clause.

Following up Mathesius' observations we can identify certain features entering into this 'conspiracy', for example: (i) the shift from the bonding

(v) the spread of thematic equatives ('clefts and pseudo-clefts') permitting any distribution of the elements of the clause into thematic and informational values.

of Subject with Actor to the bonding of Subject with Theme, e.g. I was accosted by a stranger rather than a stranger accosted me or me a stranger accosted, leading to much more frequent use of the passive voice; (ii) the shift from mental process forms methinks, melikes &c. to I think, I like; (iii) the proliferation of phrasal verbs, with a shift from I'll raise the matter to I'll take the matter up, from how can we solve this equation? to how can we work this equation out?, getting the verb at the end of the clause; (iv) the pairing of expressions like take the tailor this cloth and take this cloth to the tailor, or play the devil at cards, play cards with the devil, where the difference between the tailor and to the tailor, or the devil and with the devil has nothing to do with the transitivity functions (the part played by the tailor, the devil in the process, which is the same in both variants) but signals different roles in the information structure of the clause. All these patterns conspire to construe the discourse first and foremost in terms of Theme + Rheme and Given + New, with one element clearly signalled as Theme at the beginning of the clause and the main item of news having an unmarked location at the end. ^{And there are} Other features associated with these ^{for example} in rather deep and complex ways; ^{for example} the shift from dined, nodded, sounded, erred to had dinner, gave a nod, made a noise, made a mistake; from her hair is long, my arm is broken to she has long hair, I have a broken arm; and the predominance of verbs displaying the ergative-type voice system, such as the door opened / she opened the door, a new method evolved / they evolved a new method, he never changes his ideas / his ideas never change. These features evolved as part of the newly emerging standard spoken English; and they lead to a form of discourse in which the dominant patterns in the grammar, in the sense of those which determine primarily what options are taken up, are the textual patterns of theme and information rather than -- or at least as much as -- the ideational patterns of transitivity. In other words, the ways of meaning of the listener are precisely not taken for granted. This kind of discourse can be spoken to a stranger, who shares neither the norms of interaction nor even necessarily the context of situation; likewise it can be written in a book that is going to be printed in multiple copies. These are the things a standard language is for; and they need a grammar in which the organization of the message, and the information value of each of its parts, will typically be rendered explicit.

At the same time as this general, non-technical grammar was settling in place in English there were evolving in the major languages of Europe (among which English was emerging as one) the new technical registers of science and of learning, destined to form the leading edge in construing the new reality. Both in the Italian of Galileo and in the English of Isaac Newton we find more or less identical syndromes of grammatical features constituting the

semantic character of scientific discourse. Let me enumerate the most important of these, drawing for Galileo on the work of Maria Biaggi.²¹

1. Abstract nouns as technical terms, from ancient Greek via classical and medieval Latin:

velocità	mutazione
	incidence proportion
2. Metaphorical nouns as nominalizations of processes and properties, non-technical:

il tocco dell'acqua con la barca	the diverging and separation of the heterogeneous rays
-------------------------------------	---
3. Nominal groups expanded with words functioning as Epithet and Classifier (pre-Head in English, post-Head in Italian); such words often derived from processes and properties by 2. above):

il moto generale diurno	several contiguous refracting Mediums
-------------------------	--
4. Nominal groups expanded with phrases and clauses functioning as Qualifier (post-Head in both languages); such phrases and clauses often derived likewise from 2. above:

il mobile cadente lungo il piano quegli animaletti volanti con pari velocità	the Whiteness of the emerging Light the Motion of the Ray generated by the refracting Force of the Body
--	---
5. Metaphorical verbs as verbalization of logical relations ('causes', 'proves', 'follows' &c.):

risulta da succede	arises from is occasioned by
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6. Ways of chaining abstract participants through the text:
7. Long hypotactic and paratactic clause complexes, especially in the description of experiments.

The last two would require long passages of text for their illustration. But the following short extract from Newton [Opticks, p. 282] will exemplify a number of the features listed above:

In this Proposition I suppose the transparent Bodies to be thick; because if the thickness of the Body be much less than the Interval of the Fits of easy Reflexion and Transmission of the Rays, the Body loseth its reflecting power. For if the Rays, which at their entering into the Body are put into Fits of easy Transmission, arrive at the farthest Surface of the Body before they be out of those Fits, they must be transmitted. And this is the reason why Bubbles of Water lose their reflecting power when they grow very thin; and why all opaque Bodies, when reduced into very small parts, become transparent.

Neither Galileo nor Newton was inventing new forms of language. Probably all the grammatical features of their discourse already existed in Italian, or in English. What they did was to reconstruct the probabilities ^{of the system} and in doing so, to create a new register -- not alone, of course, but in conjunction with others taking part in the activity of science. This carried still further the

trend towards thinginess that had started in ancient times. But while evolving as clearly distinct varieties, they were in no way insulated from other forms of the standard language, including its spoken forms; thus scientific English both depended on and contributed to the standardization process and the new trends and patterns in the grammar that went with it.

Newton and his contemporaries were well aware that they needed to create new forms of discourse for codifying, transmitting and extending the new scientific knowledge. By Newton's time there had already been a century or more of language planning in various countries of Europe, notably France and England; at first concerned just with writing -- shorthands and universal character systems (for writing all languages in the same form, like numbers); then lexical taxonomies (for scientific classification of natural phenomena); and finally artificial 'languages' based on general logical principles of word formation. Such efforts were concentrated on designing the more accessible features of language -- the lexis and morphology; and none of the designed systems was ever in fact used.²² in its more hidden aspects The grammar was not planned; we can be virtually certain that neither Newton nor Galileo before him were at all aware of the important grammatical developments that characterized their work. But it was the grammar that provided the critical resources for constructing the new discourse: in Newton, (1) complex tactic patterns, based on those of speech, for the description of experiments, e.g.

I found moreover, that when Light goes out of Air through several contiguous refracting Mediums as through Water and Glass, and thence goes out again into Air, whether the refracting Superficies be parallel or inclin'd to one another, that Light as often as by contrary Refractions 'tis so corrected, that it emergeth in Lines parallel to those in which it was incident, continues ever after to be white. [p. 129]

(2) elaborate postmodified nominal groups for the mathematical expressions, for example:

The Excesses of the Sines of Refraction of several sorts of Rays above their common Sine of Incidence when the Refractions are made out of divers denser Mediums immediately into one and the same rarer Medium, suppose of Air, are to one another in a given Proportion. [p. 130]

(3) and most of all, perhaps, a newly emerging clause type 'happening a caused happening x', where two nominalized processes are linked by a verb expressing the logical relationship between them, e.g.: [p. 280]

... all Bodies by percussion excite vibrations in the Air;...

-- or with the logical relationship itself also nominalized, e.g.

... the cause of Reflexion is not the impinging of Light on the solid impervious parts of Bodies, but ... [p. 283]

The text thus follows a complex grammatical dynamic, in which experience is first construed in the form of clauses, as a world of happening which can be experimented with; and then reconstrued in the form of nominals (nouns, nominal groups, nominalizations), as a world of things, symbolically fixed so that they can be observed and measured, reasoned about, and brought to order.²³

But there was, ^{as there} always is, a price to pay. For various reasons -- partly textual, the Theme - Rheme / Given - New pattern referred to earlier; partly experiential, the need to construct technical taxonomies -- the second, nominalizing forms soon came to dominate scientific writing (see for example Joseph Priestley's The History and Present State of Electricity, 1757; and even more John Dalton's A New System of Chemical Philosophy, 1827). The reality construed by this form of discourse became increasingly arcane and remote from the commonsense construction of experience as embodied in the spoken languages of daily life. Within a hundred years it had already come to be felt as alienating; a world made entirely of things, things which became more and more abstract and metaphorical as time went on, was not the world of experience a child grew up in, and there was a widening gap between the daily language of home and neighbourhood and the increasingly elitist language of the learned disciplines. But there were other problems with this register besides its alienation. The difficulty with a reconstructed reality is that it may become too far out, too committed; by the beginning of the present century the scientists themselves were becoming dissatisfied with their own scientific metalanguage, and this motif is enunciated particularly by quantum physicists and their successors, from de Broglie, Bohr and Heisenberg to David Bohm and Ilya Prigogine.²⁴ It seems that these scientists are not aware that the problem lies with the metalanguage of their own design; they blame natural language for 'distorting' reality by making it fixed and determinate instead of fluid and probabilistic. But it is scientific language that has these properties; whereas natural language in its everyday spoken form, non-settled, non-written, non-elaborated, has precisely the flux and fluidity, the play-ful quality (i.e. elasticity, with lots of 'play' in it), the indeterminacy and the complementarity that the scientists say is required to construe the universe in its post-quantum state, in which chaos rules and there is a continuum of communication and consciousness stretching all the way from inanimate nature to ourselves and whoever may be out there beyond.

We should not forget, of course, that the everyday spoken language is still a construction of reality, even though it may be less contrived, less rigid and determinate, than what is 'written'. There is no clear line between language as it evolved with human consciousness and is learnt as 'mother tongue' by a child, and language as it underpins the most abstract and abstruse scientific

theories about the universe. As I put it earlier, the grammar of every language in its everyday form is a theory of experience. But as our linguistic construction of experience becomes more and more elaborated, and its grammar increasingly remote from its origins in everyday speech, the high prestige, elitist discourse which it engenders becomes available for ideological loadings of all kinds. We are all familiar with the bureaucratic discourse that derived from it, with examples like:

Discharge is a redundancy severance, the circumstances of which do not attract payment of the retrenchment benefit.

The move towards 'Plain English' for documents addressed to the public is a reaction against obscure wordings of this kind. But much more threatening is technocratic discourse; this combines the bureaucratic with the scientific in forms which, while obscuring the issues at stake, by the same token contrive to persuade us that, since the issues are so obscure, we cannot hope to understand them and so ^{we} should leave every decision to the experts.²⁵ Lemke quotes the following:

Many large-scale sociological and economic studies show weak and inconsistent associations of educational outcomes with school-resource proxy variables such as expenditures per student and school size, and relatively moderate and consistent amounts of variance associated with student background variables such as socioeconomic status (SES) and family size (McDermott, 1976). Other research suggests that specific and alterable behaviors of parents toward their children such as intellectual stimulation in the home environment are still more strongly predictive of cognitive development than are such proxy variables as family SES and size (Walberg and Marjoribanks, 1976).

Lemke comments:

We are told [here] that money spent on education has relatively little to do with students' learning and that lower class students don't do much worse than upper middle class students in school. The authority of 'many large-scale ... studies' is offered for these assertions. A critical reader might offer the absurdity of the studies' conclusions as authority for doubting the reliability of social science research.

Thus there are some ways in which the nominalizing, metaphorical grammar of late twentieth century prestige varieties of English has become dysfunctional, at least from some points of view. In the technical, scientific contexts in which it first evolved it construes the world after a fashion which, although forward-looking at that historical 'moment', has now become excessively abstract, objectifying and determinate. And when extended into other contexts it helps to perpetuate an outmoded social structure and is co-opted to promote the anti-democratic ideology that goes with it.

So when planning a language, applied linguists are not engaged in forging

some passive, ideologically neutral instrument for carrying out a prearranged policy. They are creating an active force which will play its part in shaping people's consciousness and influencing the directions of social change. With this in mind, let us take a look at the present global context within which applied linguists are now holding their Ninth World Congress.

We live -- we are constantly being told -- in an information society. What this means is that the dominant mode of economic activity that human beings engage in is no longer that of exchanging goods-&-services, as it has been since the beginning of settlement, but that of exchanging information. And information is made of language. It is an applied linguistic world, in which even numbers, and numerical data, become significant only in the context of discursive constructions.

But there has been another, rather less publicized, change in the human condition: that our demands have now exceeded the total resources of the planet we live on. Within a microsecond of historical time of the earth the human race has turned from net creditor to net debtor, taking out more than we put in; and we are using up these resources very fast. This is so little publicized that we might suspect what we are living in is really a disinformation society.

I took some cuttings from one day's newspaper, the day on which I happened to be writing this section of the paper. Here is an extract from one news article. The article is headed "Air travel's popularity to soar to new heights" and, like most news nowadays, it is about what someone had to say, in this case the 'annual aviation market forecast of the US plane manufacturer Boeing':

Its forecast, regarded as one of the most reliable indicators of aviation trends, says airlines will buy 9,935 jet aircraft of all types over the next 15 years at a cost of A\$834 billion.

It says airline traffic to, from and within the Pacific area will lead the growth with rates unmatched anywhere else in the world.

The study says the rationale for a more optimistic outlook includes prolonged air travel expansion driven by continued growth in discretionary income and a decrease in the real cost of travel. [Sydney Morning Herald, Monday 12 March 1990]

Everything here, and in countless other such texts repeated daily all round the world, contains a simple message: growth is good. Many is better than few, more is better than less, big is better than small, grow is better than shrink, up is better than down. Gross National Products must go up, standards of living must rise, productivity must increase.

But we know that these things can't happen. We are using up the capital resources -- not just the fossil fuels and mineral ores, which we could (pace

Boeing) do without, but the fresh water supplies and the agricultural soils, which we can't live without. And at the same time as we are consuming we are also destroying. We are destroying many of the other species who form part of the planet's life cycle; and we are destroying the planet itself, through global warming and general poisoning ~~of the planet~~ with carbon dioxide and methane; through ozone depletion; through acid rain; and most of all by increasing our population at a rate of almost a hundred million new people a year -- at a time when humankind is already using up nearly half of the total productive capacity of the globe.²⁶ ~~It is a matter of whether the system will be able to support the growth of the human population.~~

Paul Ehrlich, one of those who (along with David Suzuki and Edward Goldsmith) are doing most to make us aware of these things, made a point that I referred to earlier, and that is fundamentally important to us as linguists. Human beings, he said, have evolved so that they are not equipped to deal with the kinds of change that are happening now. We are good at recognizing and responding to sudden, catastrophic changes; but bad at recognizing and admitting to ourselves what he calls 'slow motion crises' formed by gradual trends and shifts of probabilities. Even a massive change, provided it takes place slowly enough, will simply pass us by.

Ehrlich's observation on this is that we have to 'change the way in which we perceive the world'. He sees this as an exercise in information: educating people to respond to trends, graphs and numbers -- not just to be able to follow them, but to take them seriously, to treat them as 'news'. He suggests that 'some important environmental state report should be shown every night on the media'. But let us look at the situation from a linguistic point of view. What I have been suggesting is that the same sort of gradual, stealthy processes as take place in the environment also take place in language; and we are equally unaware of them -- more so, in fact, because they are beyond the range of our conscious attention.

It is not difficult to become aware of obvious verbal anomalies, like the following cartoon caption quoted by Charles Birch from the Los Angeles Times:

Eventually we will run out of food to feed ourselves and air to breathe ... this is something we must learn to live with!

Such explicit motifs, especially where self-contradiction is built in, are the most easily accessible to our conscious awareness. And we can fairly easily train ourselves to react to wordings like 'the survey painted a bleak picture, saying that the number of business failures would continue rising' and 'there will be relatively stable fuel prices in the long term and no US or world recession in the foreseeable future' -- although we usually fail to

perceive any contradictions unless they are thrust before us in adjacent sentences.

accessible to reflection
Still reasonably [^] -- at the next level down in our consciousness, so to speak -- are the lexical effects: single words with affective loadings of one kind or another and regular, more or less ritualized collocations, like inflationary pressures, prospects sliding, optimistic outlook, unmatched growth rates, business climate improving, early stages of recession. It does not take much work to show how our world view is constructed by expressions such as these. When we read output fell sharply, it is obvious that all our negative loadings from childhood come into play: falling is painful, sharp things are dangerous, and both (especially together!) are to be avoided. On the other hand traffic is expected to grow calls up all the comfortable smiles of the admiring aunts who told us how we've grown, as well as the positive relation of growth to consumption -- eat your meat and you'll grow into a big girl / boy. And we only have to mention a word like shrink to be aware of its pejorative connotations: shrunken bodies and heads, the one who shrinks heads (the psychiatrist), and so on. Some people have tried to maintain the positive value of grow but reconstrue it in expressions like zero population growth and negative growth; but the zero and the negative sabotage the effort -- how can anything that is 'zero' or 'negative' be a desirable goal? (Others have tried to find negatively charged words for growth, like gigantism and elephantiasis; but these don't work either -- the words themselves are too elephantine, and even if giants are baddies elephants are definitely goodies.) It might be more effective to redefine growth as a failure to shrink. Since we are going to have to reduce the GTP (gross terrestrial product), should we not exploit the power of words by making shrink the positive term and labelling 'growth' very simply as negative shrinkage? This is using the power of the grammar: ^{in this case} the device of reversing the marking. How much more effective it would be, for example, if those who are ecologically aware, instead of letting themselves be called greenies, in marked contrast to ordinary people, became themselves the unmarked category and the rest of the population were reconstrued as baldies.

A little way beyond these is the outer layer of the grammar: the morphological construction of words, types of concord, and closed system or 'function' words like prepositions and pronouns. This third level is where much of the work of anti-sexist language planning is done: engineering the third person forms he / she, his / her; reconstructing words like chairman, manpower, salesgirl; taking out the markedness from pairs like author / authoress, nurse and male nurse; redesigning concord structures like everyone knows his job to everyone knows their jobs, and so on. On the other hand,

~~rather little~~ of the semantics of growthism^{relatively little} is construed at this level -- and there is even some countersuggestion that small is beautiful, in the form of diminutives, although this tends^{to be} ^{patriarchal} neutralized by their^{combination of sexism} and childism.

But if we probe into the inner layer of the grammar, to the cryptogrammatic fourth level that people are least aware of, here we find a gradual, clause by clause synthesizing of a world view, a hidden theory of experience on which we unconsciously base our actions and our strategies for survival. There is a syndrome of grammatical features which conspire -- in Martin's term -- to construe reality in a certain way; and it is a way that is no longer good for our health as a species. Let me try and identify four of these, beginning with one that is familiar and easy to access.

1. Whorf pointed out many years ago how, unlike the American Indian languages he knew, 'Standard Average European' languages like English make a categorial distinction between two kinds of entity: those that occur in units, and are countable in the grammar, and those that occur in the mass and are uncountable. (More accurately, the latter can ^{but when they are,} be counted; ^{the count refers} to 'kinds of', not 'units of'; e.g. soils.) Our grammar (though not the grammar of human language as such) construes air and water and soil, and also coal, and iron, and oil, as 'unbounded' -- that is, as existing without limit. In the horizons of the first farmers, and the first miners, they did. We know that such resources are finite. But the grammar presents them as if the only source of restriction was the way that we ourselves quantify them: a barrel of oil, a seam of coal, a reservoir of water and so on -- as if they in themselves were inexhaustible.

2. Among the properties construed by the grammar as gradable, most have a negative and a positive pole: for example, with 'good' and 'bad', 'good' is construed as positive. So the quality of a thing means either 'how good or bad it is' or 'the fact that it is good', but never 'the fact that it is bad'. In the first sense we can say how do you rate the quality of these chocolates, good or bad? In the second sense, the manufacturer can refer to them as chocolates of quality, without worrying that this could ever mean 'bad quality'. Similarly size means both 'how big?' and 'being big' (look at the size of it!); length means both 'how long?' and 'being long', and so on. There are various manifestations of this asymmetry throughout the grammar; but the significant point is that quality and quantity are always lined up together (as they are also in that expression). The grammar of 'big' is the grammar of 'good', while the grammar of 'small' is the grammar of 'bad'. The motif of 'bigger and better' is engraved into our consciousness by virtue of their line-up in the grammar.

In transitivity, the part of the grammar that construes our experience of processes -- actions and events, mental and verbal processes, relations of various kinds --, the entities that take part in processes of a material kind are arranged by the grammar along a continuum according to their potential for initiating such processes: how likely they are to perform the action or to cause the event to take place. Naturally human beings come at the most active, agentive pole, with inanimate objects located at the other end. Such things are acted upon but do not act, and they stay where they are until disturbed. The only environment where inanimates regularly figure as agents is in catastrophic contexts, where (at least if they are big enough) they can become Actor in a process of the 'destroy' subcategory of material processes; and even here they are often metaphorized events, e.g. the earthquake destroyed the city; cf. fire damaged the roof, a branch fell on the car. The grammar does not present inanimate objects as doers, certainly not in ongoing, constructive or conservative processes. So we have problems with David Suzuki's formulation all the kinds of things that forests do. In English if I say of an inanimate object what's it doing? it means 'why is it there? -- remove it!'. So what's that forest doing? implies 'clear it!' rather than expecting an answer such as that it's holding water in store, it's cleaning and moistening the atmosphere, it's stopping flooding, it's stabilizing the soil, harbouring life forms and so on. The language makes it hard for us to take seriously the notion of inanimate nature as an active participant in events.

4. There is one ^{particular} point on this continuum where the grammar introduces a sharp dichotomy, making a clear division of phenomena into two classes. This is often referred to as human versus non-human, but it isn't that; it's conscious versus non-conscious -- those entities that are treated as endowed with consciousness and those which are not. English constructs this dichotomy at various places all over the grammar. ^{manifestation is in} The most obvious ^{the pronoun} system, where conscious things are he / she while non-conscious things are it. More far-reaching, however, is the fundamental distinction made by the grammar of mental processes, where the Senser is always a conscious being: thus a clear line is drawn between entities that understand, hold opinions, have preferences &c., and those that do not. Non-conscious entities can be a source of information, but they cannot project an idea (we can say my watch says it's half past ten, but not my watch thinks it's half past ten). This binary theory of phenomena has obviously been important for our survival, in the stage of history that is now coming to an end. But it imposes a strict ^{including a} discontinuity between ourselves and the rest of creation, with 'ourselves' ^{including a} select band of other creatures that are in some semantic contexts allowed in

-- the most typical of these being first our farm animals and now our highly destructive pets. And, of course, it totally excludes the concept of Gaia -- of the earth itself as a conscious being. The grammar makes it hard for us to accept the planet earth as a living entity that not only breathes but feels and even thinks: that maintains its own body temperature despite massive changes in the heat that it receives from the sun, and that dies slowly but inevitably as each of the living species that compose it is destroyed. Let us at least try re-writing that last description: the earth as a living entity that ... maintains her own body temperature despite massive changes in the heat that she receives from the sun, and that dies, slowly but inevitably, as each of the living species that compose her is destroyed. (We have to choose male or female; and Gaia was a goddess, the 'mother Earth'.)²⁷

A grammar, I have suggested, is a theory of experience; a theory that is born of action, and therefore serves as a guide to action, as a metalanguage by which we live. The particular grammars that we live with today are the products of successive 'moments' in the space-time of human history. Much of their meaning potential will no doubt continue to be valid; we are unlikely to demand a sudden, catastrophic reconstruction of reality. But at the same time there are disjunctions, contradictions and overdeterminacies which ensure that it must continue to evolve. A language is a metastable system, which can only persist by constantly changing in interaction with its environment. The slowest ^{part of it} to change is the grammar, especially the inner layers of the grammar, the cryptogrammar, where the real work of meaning is done. The lexis is much more accessible; indeed we already have our slogans for the new age, based on words like sustain: what we need now, ^{we are told,} is sustainable development. We have an American professor lecturing in Australia on global sustainability (note here level two at work: everything is possible, by nominalizing the potentiality morpheme -- sustain, sustainable, sustainability). But, by the same token, the lexis is ^{rather} easily co-opted:

INSECTS may provide the vital factor in making Australia a world leader on sustainable development. [Australian, 10 March 1990]

-- and we are back at leading, being out in front, and so once again to growth. You cannot ^{on the other hand} co-opt the grammar in this way; certainly not its inner layers.

But, again by the same token, neither can you engineer it. I do not think that even the language professionals of AILA can plan the inner layers of the grammar; there is an inherent antipathy between grammar and design.²⁸ What we can do is draw attention to it; to show how the grammar promotes the

ideology of growth, or growthism. This may suggest in a fragmentary way what the alternatives might be like. But -- and this brings me to my final motif -- I think that this could only be done effectively under certain conditions. Let me summarize at this point some of the strands in this rather peripatetic discourse.

I started with one of our central concerns, language planning; and more specifically systemic language planning. Although language is an evolved system, not a designed system, it may become necessary to manage it at certain times and places in history: typically, where a language has rapidly to take on new functions, especially technical functions. This is not the management of information; it is the management of the system out of which information is constructed.

Such language planning is thematic not disciplinary: that is to say, it is concerned not with language as object but with systematically extending the power to mean, typically in the context of particular 'fields', or types of social activity. Institutionally, such language planning may involve all the major components of applied linguistics: computational linguistics and artificial intelligence, first and second language teaching, even clinical linguistics, as well as the more obvious concerns of sociolinguistics, multilingualism, and language in relation to culture.

To understand these processes, and especially to be able to intervene in them, we have to theorize about how language constructs reality: how language evolved as the resource whereby human beings construe experience. The lexicogrammatical continuum, from the vocabulary (the part showing above the surface of consciousness -- the tip of the iceberg, so to speak) to the inner layers of the grammar, is the key component, the central processing unit for construing ideational meanings and mapping them on to meanings of the other primary kind, the interpersonal meanings which construct and enact social relationships.

But besides the more familiar contexts for language planning there are certain other spheres where language has become problematic. One was the register of scientific discourse, which scientists themselves began to find constricting: its highly nominalized grammar construed a world of fixed, determinate, discrete and abstract objects and could not cope with the flux, the indeterminacy and the continuity that they now saw as the deeper mode of reality. At the very least, such a distinct variety, with its highly metaphorical construction of the resources of the grammar, created a division between esoteric, technical knowledge and ^{the} commonsense knowledge of daily life, a division that is certainly dysfunctional in a modern democratic society.

The other problematic sphere is that of language and prejudice. Here

while sexist and racist attitudes are clearly constructed in language it is not any particular variety that is at issue, nor the system of the language as a whole, but the deployment of resources within the system: Thus sex roles are construed by such things as mothers taking up different grammatical options in answering questions asked by boys and by girls; different interpersonal choices made in forms of address and reference; and different transitivity roles assigned to men and women in narratives. Sexual difference, racial otherness, social inequalities of all kinds are engendered and perpetuated by varying the probabilities in the selection of options within the grammar of the everyday language.

Social class is likewise construed in language, and transmitted by parents from different classes favouring different selections within the grammar. But it is a more 'slow motion' and cryptotypic process than the construction of gender or race: a long-term quantitative effect of orientation towards one 'quarter' rather than another within the overall semantic space described by the language.²⁹ Perhaps because of the pervasive effect of different attitudes towards generalization and abstraction, the two 'feel like' competing realities.³⁰ The theory of 'codes' attempts to locate the linguistic basis of classism at the point where the system and the instance meet (where parole becomes langue -- except that we have to redefine langue and parole for this to make sense), showing that the different coding orientations of the two classes are not different systems but different deployment of resources within the system: different enough, however, such that the contradiction which is construed in this way has not yet been historically transcended.³¹

Meanwhile, according to some scientists, a deeper crisis is at hand, no less than the threatened destruction of the entire planet as a habitable environment. This too we can investigate linguistically as a site for possibly deconstructing reality through the grammar. We might be able to work on specific issues at the outer layers of the grammar, replacing war discourse (the language of the Pentagon) by peace discourse, the discourse of borrowing (the language of commercialism and credit capital) by that of saving, the discourse of building (the language of megacontracts) by that of keeping under repair. We might put certain key words in the dock, words like production and growth. Production is a major semantic confidence trick; as Goldsmith has pointed out, we don't produce anything at all -- we merely transform what is already there into something else, almost always with some unwanted side effects. (Just as a cow does not 'produce' meat; it transforms grass into meat, churning out vast quantities of methane in the process.) We could perhaps relexicalize the semantic domain of 'production'. Growth means evolving or maturing, but it also means getting fat; we have noted the

[add to p. 28, new and separate paragraph following central paragraph ending '... has not yet been historically transcended.']

The system itself is constantly open to change, as each instance slightly perturbs the probabilities; where such perturbations resonate with changing material and social conditions the system is (more or less gradually) reshaped. Thus in renaissance English there evolved a syndrome of features which collectively reoriented the grammar away from preoccupation with the experiential towards greater concern with the textual -- from the clause as representation of a process towards the clause as organization of a message. In relation to the grammar as a whole this reorientation was very slight; but it was sufficient to nudge the system so that it could become more technical, more attuned to a specialized division of labour, less dependent on the particulars of shared experience. The everyday grammar thus provided a point of departure for, while still remaining in contact with, the alienating discourses of modern technology and science.

collocational and morphological support for the motif of 'small is beautiful' -- but also that much of it suspect as being patriarchal. But all these are relatively minor issues, semantically somewhat 'localized' in their scope. The main issue is that of growthism in the grammar; and we saw how deeply engrammatized are the motifs of growth versus shrinkage, of the unboundedness of our material resources, of the passivity of the inanimate environment and of the uniqueness of humankind instead of our continuity with the rest of creation. These and other features of the language system construe our experience in such a way that we believe we can expand for ever -- our own numbers, our own power and dominance over other species, our own consumption and so-called 'standard of living'. Whereas in fact, as Suzuki has shown us, even at present population levels the rich 20% will have to live far more frugally if the poorer 80% are to be able to live at all.³²

You may think that by now I have left language behind, and am talking simply of social and political issues. But I don't think I have. My point is that such issues are also linguistic ones. Growthism and classism are our two major ideological menaces; and ideologies are constructed in language.³³ But ~~more specifically, I think that~~ the linguistic perspective suggests one further consideration: that we shall not solve one of these problems without also solving the other. Both growthism and classism were positive and constructive for a certain moment in our history; both have now become negative, the means of self-destruction by division among ourselves and by division between ourselves and the rest of creation. So much we must accept. Now we have seen that, as a general principle, it is the linguistic system (things about which we have no choice) that divides us from everything else; whereas it is the choice of options within the system (taking up different probabilities) that divides us among ourselves. To come back to gender again: what construes our sex roles is not the inherent sexism in the ^{forms of the} language (such things are useful for making people conscious of the problem, but in themselves are trivial -- some of the most sexist societies have no trace of gender morphology in their languages) but the way the resources of the language are deployed, how the meaning potential is taken up in the construction of the subject in the family, the media, popular literature and elsewhere. In other words those things which all humans share, or at least all the members of a primary culture band, are construed for them by the forms of the grammar; while those which divide them, which discriminate one group over another, are construed by systematic variation in the choices made within the grammar -- what Hasan refers to as 'semantic variation'.

But there is no insulation between ^{these} two, because the system is the set of its probabilities, ^{in the same way that} _^ climate is the set of probabilities in the

weather. Climate and weather are one phenomenon, not two; but interpreted within different time depths. So if the ^{linguistic} ~~system~~ (that is, our long-term, slow motion semiotic praxis) construes us as lords of creation, our shorter-term but no less systematic praxis, the regular exercise of choice within the system, construes a fractal pattern whereby some of us are lords over the rest. The one construct that lies nearest the point of complementarity -- that is, that can be equally well interpreted as long-term patterns of choice within the system or as a rather ill-defined system of its own (either as long-term weather patterns or as a temporary kind of climate) -- is that of social class. It will be difficult to deconstruct growthism without also deconstructing classism, especially now that class has become a world phenomenon, so that what were previously regions of the city are now regions of the globe. The linguistic evidence suggests that ^{these} ~~two~~ transformations will have to take place together: that the hegemony arrogated by the human species is inseparable from the hegemony usurped by one human group over another, and that neither will come to an end as long as the other still prevails.

Now that ~~our friends and colleagues~~ from the heart of the Eurasian continent ~~leaves of them only a very few miles north of here~~ are leaping out of the socialist frying-pan into the capitalist fire; and we ponder whether, with Fukuyama, history is about to end³⁴ or, with Marx, it is (after all) still not ready to begin; and we realize that, long before we reach the (by now proverbial) one square metre of ground per human being, we have to learn to educate five billion children (and that is an applied linguistic task if ever there was one!) -- at such a time it is as well to reflect on how language construes the world. We cannot transform language; it is people's acts of meaning that do that. But we can observe these acts of meaning as they happen around us, and try to chart the currents and patterns of change.³⁵

~~Despite being here on the promontory of Sassandran, I shall not set myself up as a prophet -- not that it would matter, since I should not be believed anyway.~~ Suzuki says "the planet may soon become unlivable -- it's a matter of survival". Let us formulate this in terms of possible outcomes:-- there is no historical necessity that this planet will survive in a habitable form, such that we (among ^{others} ~~others~~) can continue to live on its surface -- this is merely one of the possibilities for the future. What I have tried to suggest is that the things which ~~threaten us, which~~ may rule out this possibility and which we ourselves have brought about -- classism, growthism, destruction of species, pollution and the like -- are not just problems for the biologists and the physicists. They are problems for the applied linguistic community as well. I do not suggest for one moment that we hold the key. But we ought to be able to write the instructions for its use.

NOTES

My sincere thanks to David Butt and to Christian Matthiessen for responding to my request for comments on the paper, within the impossibly short time I allowed them for the purpose.

- ¹ See Francisco Gomes de Matos, '20 years of applied linguistics: AILA Congresses 1964 - 1984', in Jos Nivette, Didier Goyvaerts & Pete van de Craen (eds.), AILA Brussels 84: Proceedings, Volume 5, 1763 - 1779.
- ² See the Preface by Bernard Pottier and Guy Bourquin to Actes du premier Colloque international de Linguistique appliquée, Nancy: Faculté des Lettres et des Sciences humaines de l'Université de Nancy (Annales de l'Est, Mémoire no. 31), 1966, 7 - 8.
- ³ See Fred C.C. Peng, 'What is neurolinguistics?', Journal of Neurolinguistics 1.1, July 1985, 7 - 30; also Gordon Bruce McKellar, 'The language of neurolinguistics: principles and perspectives in the application of linguistic theory to the neuropsychology of language', in M.A.K. Halliday, John Gibbons & Howard Nicholas (eds.), Learning, Keeping and Using Language: selected papers from the Eighth World Congress of Applied Linguistics, Sydney, August 1987, Amsterdam: Benjamins, 1990, Vol. 1, 331 - 351.
- ⁴ What Meillet wrote was 'un langage forme un système très délicat et très compliqué où tout se tient rigoureusement' (Année Sociologique 8, 1903/4, p. 641). For Firth's rejection of this 'monosystemic principle' see the first few paragraphs of 'Sounds and prosodies', and also 'Personality and language in society', Chapters 9 and 14 in J.R. Firth, Papers in Linguistics 1934 - 1951, London: Oxford University Press, 1957.
- ⁵ The very useful concept of 'institutional linguistics' was introduced many years ago by Trevor Hill; see his paper 'Institutional linguistics' in Orbis 7, 1958, 441 - 455.
- ⁶ See S.J. Maina, 'Principles adopted for the enrichment of Kiswahili language', New Language Planning Newsletter 2.2, December 1987, 1 - 3.
- ⁷ After Marr's death his views and those of his successors such as Meščaninov were rejected outright by Stalin (or whoever wrote 'On marxism in linguistics' on Stalin's behalf) in the linguistics controversy in Pravda in May - July 1950; see Jeffrey Ellis & Robert Davies, 'The Soviet linguistics controversy', Soviet Studies (Glasgow) 3, 1951. Stalin asserted that language was not part of the superstructure, and that it changed (not by revolutionary changes but) only very gradually over time, particularly its grammatical system and basic lexical stock.
- ⁸ Including morphology, of course, in those languages where words display morphological variation.
- ⁹ For the notion of 'metafunctions' in systemic theory see my Language as Social Semiotic: the social interpretation of language and meaning, London: Edward Arnold, 1978, especially Chapters 2 and 10. There is an excellent summary in Christian Matthiessen's review of my Introduction to Functional Grammar in Language 65.4, December 1989, 862 - 871.

- ¹⁰ We see language arising out of the impact of the material and the conscious from another perspective in the ontogenesis of language. The first symbolic acts occur at the time of the initial bodily engagement with the environment (reaching and grasping); protolanguage, shared with other mammals, accompanies crawling; and language, uniquely human as far as we know, is associated with walking.
- ¹¹ That is, conditions other than creolization and decreolization. The former is a more or less catastrophic disruption; the latter an accelerated revival.
- ¹² Cf. my 'Language and the order of nature', in Nigel Fabb et al. (eds.), The Linguistics of Writing: arguments between language and literature, Manchester: Manchester University Press, 1987, 135-154.
- ¹³ And sometimes perhaps was not taken up. For example, it is said that conditions in China in the southern Sung dynasty were very similar to those of Europe in the fifteenth century (see for example Mark Elvin, The Pattern of the Chinese Past, London: Eyre Methuen, 1973; especially Part Two, 'The medieval economic revolution'). Yet in spite of this the transition to capitalism did not take place and the Ming empire settled into a small town market economy.
- ¹⁴ Cf. for example Stephen Harris' observations on what is explicitly taught to children in Australian Aboriginal societies: there is no instruction in experiential matters (e.g. field skills), which are learnt by imitation and so do not need an abstract educational discourse; but a great deal of instruction in interpersonal matters. See Stephen Harris, Culture and Learning: tradition and education in Northeast Arnhem Land, Darwin: Northern Territory Department of Education, 1980.
- ¹⁵ From Proposition 13 of Aristarchus' 'On the sizes and distances of the sun and moon'. See Sir Thomas Heath, Aristarchus of Samos: the ancient Copernicus, New York: Dover Books, 1981 [originally published Oxford: Clarendon Press, 1913], pp. 392-3 (Greek original with English translation).
- ¹⁶ see Ruqaiya Hasan, 'Semantic variation and sociolinguistics', Australian Journal of Linguistics 10, 1990; and the paper by Ruqaiya Hasan and Carmel Cloran referred to in note 29 below.
- ¹⁷ See Cate Poynton, Language and Gender: making the difference, Oxford: Oxford University Press, 1987. On assignment of agency roles see Anne Thwaite, Sexism in three Mills & Boon Romances, University of Sydney Department of Linguistics (B.A. Honours thesis), 1983; for an example of the linguistic construction of sexist ideology see Ruqaiya Hasan, 'The ontogenesis of ideology: an interpretation of mother-child talk', in Terry Threadgold et al. (eds.), Semiotics - Ideology - Language, Sydney: Sydney Association for Studies in Society & Culture, 1986, 125-146. See also the recent volume edited by Terry Threadgold and Anne Cranny-Francis, Feminine / Masculine and Representation, London & Sydney: Allen & Unwin, 1990.
- ¹⁸ See Ruqaiya Hasan, 'Ways of saying: ways of meaning', in Robin P. Fawcett et al. (eds.), The Semiotics of Culture and Language, London & Dover, N.H.: Frances Pinter, 1984, Vol. 1, 105-162.

- ¹⁹ See J.R. Martin, 'Grammatical conspiracies in Tagalog: family, face and fate -- with regard to Benjamin Lee Whorf', in James D. Benson et al. (eds.), Linguistics in a Systemic Perspective, Amsterdam: Benjamins (Current Issues in Linguistic Theory 39), 1988, 243-300. Martin's discussion of the place of grammar is particularly insightful. Note that Martin is not taking English as a norm; in each case he specifies the corresponding features of English grammar which point the other way -- although, of course, the relevant clusterings, or syndromes, of English would have to be separately established (cf. below).
- ²⁰ See Vilém Mathesius, 'On linguistic characterology with illustrations from Modern English', in Josef Vachek (ed.), A Prague School Reader in Linguistics, Bloomington, Indiana: Indiana University Press, 1964, 59-67 [originally published 1928]. See also Chapters 3 and 5 of my Introduction to Functional Grammar, London: Edward Arnold, 1985.
- ²¹ The account of Galileo's language is the work of Maria Luisa Altieri Biaggi, as reported in her presentation to the Workshop 'The evolution of scientific English' at the University of Bologna, Centro di Studi sui Linguaggi Specifici and Centro Interfacoltà di Linguistica Teorica e Applicata "Luigi Heilmann", 22-23 May 1989. See also G. Zanarini, 'Rileggendo Galileo: riflessioni sul linguaggio della formazione scientifica', Giornale di Fisica 23.2, April-June 1982, 109-125. For the language of Newton see my 'On the language of physical science', in Mohsen Ghadessy (ed.), Registers of Written English: situational factors and linguistic features, London & New York: Pinter, 1988, 162-178.
- ²² But the experience of constructing them, especially the lexical taxonomies, influenced people's conception of the nature of language, and also their understanding of their own languages -- one interesting output of this exercise was the appearance in England, nearly 150 years later, of Peter Mark Roget's Thesaurus of English Words and Phrases, one of the best-selling applied linguistic publications of all time. For a full account see Vivian Salmon, The Study of Language in 17th-century England, Amsterdam: Benjamins (Studies in the History of Linguistics 17), 1979.
- ²³ All extracts taken from Sir Isaac Newton, Opticks, or A Treatise of the Reflections, Refractions, Inflections and Colours of Light [based on the Fourth Edition, London, 1730], New York: Dover, 1952. The treatise was first published in 1704, the original manuscript (itself the output of twenty years' work) having been destroyed by fire in 1692.
- ²⁴ See especially David Bohm's discussion of the 'rheomode', Chapter 2 of his Wholeness and the Implicate Order, London: Routledge & Kegan Paul, 1980.
- ²⁵ See J.L. Lemke, 'Technical discourse and technocratic ideology', in M.A.K. Halliday, John Gibbons & Howard Nicholas (eds.), Learning, Keeping and Using Language: selected papers from the Eighth World Congress of Applied Linguistics, Sydney, August 1987, Amsterdam: Benjamins, 1990, Vol. 2,
- ²⁶ See David Suzuki, Inventing the Future: reflections on science, technology and nature, London and Sydney: Allen & Unwin, 1990: Compare also Robert Ornstein & Paul Ehrlich, New World, New Mind: changing the way we think to save our future, London: Methuen, 1989.

- ²⁷ For the 'Gaia hypothesis' see James Lovelock, The Ages of Gaia: a biography of our living earth, Oxford: Oxford University Press, 1989.
- ²⁸ This is not to deny the achievements in designed languages ('artificial languages') such as Esperanto. But these are based on existing grammars; they do not attempt to change the grammar's construction of reality.
- ²⁹ See Ruqaiya Hasan & Carmel Cloran, 'A sociolinguistic interpretation of everyday talk between mothers and children', in M.A.K. Halliday, John Gibbons & Howard Nicholas (eds.), Learning, Keeping and Using Language: selected papers from the Eighth World Congress of Applied Linguistics, Sydney, August 1987, Amsterdam: Benjamins, 1990, Vol. 1, 67-99.
- ³⁰ As suggested by Michael Puleston, in An Investigation into Social Class Differences among School Pupils in Answering Interview Questions, University of Sydney M.A. dissertation, 1979.
- ³¹ In other words, the system (the more or less permanent, invariant features of the language) construes the meaning styles, value systems and ideologies that constitute the culture as a whole; it does not represent the perspective of any one group within the culture -- not even that of a 'ruling class'. If the system is hegemonic, this is because it defines the potential within which meanings can be meant. It is the deployment of resources within the system that differentiates social groups within the culture.
- ³² These scientists may be wrong. But the main argument that I have seen advanced against them is that prophets of doom have always been wrong in the past. This seems irrelevant.
- ³³ Important work on language and ideology has recently been appearing in Australia, by (among others) Ruqaiya Hasan, Gunther Kress, J.R. Martin, William McGregor, Michael O'Toole, Paul Thibault, and Terry Threadgold. Examples were cited in notes 16-19 and 29 above; see also the following: Ruqaiya Hasan, 'What kind of resource is language?', Australian Review of Applied Linguistics 7.1, 1984, 57-85; Terry Threadgold, 'Semiotics -- ideology -- language' and J.R. Martin, 'Grammaticalizing ecology: the politics of baby seals and kangaroos', both in Terry Threadgold et al. (eds.), Semiotics - Ideology - Language [see note 17 for reference], 15-60, 225-267; William P. McGregor, 'Language and ideology of a police tracker story in Gooniyandi', in M.A.K. Halliday et al. (eds.), Learning, Keeping and Using Language [see note 24 for reference], Vol. 2, 175-188; Paul Thibault, 'Grammar, technocracy and the noun: technocratic values and cognitive linguistics', in Eija Ventola (ed.), Selected Papers from the Sixteenth International Systemic Congress, Helsinki, June 1989 [details not yet available]; papers by the abovementioned authors in David Birch & Michael O'Toole (eds.), Functions of Style, London: Pinter Publishers, 1988.
- ³⁴ See Francis Fukuyama, 'End of history and the triumph of liberalism ...', Washington Post, December 1989. Fukuyama's argument is summed up by Peter Munz as 'one tautology and one tacit platitude' (Guardian Weekly, Vol. 142 no. 6, February 11, 1990, p.2). For capitalism as 'the closing chapter of the prehistoric stage of human society' see Karl Marx, A Contribution to the Critique of Political Economy trans. N.I. Stone, Chicago: Kerr, 1904, Preface.
- ³⁵ As always, language also works by its example -- the metaphoric processes by which language itself displays the features it is construing. Thus the patterns of change we observe amount to a form of growthism in language.

END

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